

was no significant difference among HBV genotypes in the levels of alanine transferase (ALT), aspartate transferase (AST), total bilirubin (TBIL), gamma-glutamyl transferase (GGT), alkaline phosphatase (ALP), total bile acid (TBA). The positive rates of PreS1 antigen of genotype C and genotype BC were high (72.3% and 67.3%, respectively) while that of genotype B was low (29%). On the contrary, genotype C (24.6%) and genotype BC (26.1%) indicated lower negative rates of PreS1 antigen than genotype B (67.1%).

**Conclusions:** HBV genotypes had a geographical distribution. Genotype C showed more serious liver dysfunction than genotype B and was easier to develop into chronic hepatitis, liver cirrhosis and liver cancer. Further study was needed to know why genotype C has high PreS1 positive rate while genotype B has high PreS1 negative rate.

#### **PP-113 Clinical research on myocardial injury of chronic hepatitis B virus infection patients**

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**Objective:** To study the relation and clinical significance between chronic HBV infection and myocardial injury.

**Methods:** To retrospective analyze the clinical date of 93 chronic HBV infection patients from January 2010 to February 2011 in Xinjiang two centers.

**Results:** Between the four groups of chronic hepatitis B, chronic severe hepatitis B, the compensatory stage of hepatitis B liver cirrhosis, the decompensatory stage of hepatitis B liver cirrhosis: (1) The patients had elevated enzymes, the abnormally high rate of chronic hepatitis B severe hepatitis group and hepatitis B cirrhosis group is higher than other two groups, but the difference was not statistically significant ( $P > 0.05$ ). (2) In 93 patients, the electrocardiograms of 7 patients were abnormally, accounting for 7.53%. They are 2 cases of sinus bradycardia, 1 case of anteroseptal myocardial disease to be ranked, 1 case of anteroseptal myocardial ischemia, 1 case of left branch block and 1 case of incomplete left bundle branch block. Before 6 cases were from chronic hepatitis B group, the last one case from hepatitis B cirrhosis group. (3) Among 93 patients, 52 patients had abnormal manifestation of cardiac color Doppler ultrasound, accounting for 55.91%. But the abnormal manifestation had different abnormalities during the patients in different groups, and most patients had multiple abnormalities. Compare other three groups, the chronic hepatitis B group had higher incidence rate of mitral and tricuspid regurgitation detected in the systolic. the chronic hepatitis B group had statistical significant with chronic severe hepatitis B group ( $P < 0.05$ ), and no statistical significant with hepatitis B liver cirrhosis group ( $P > 0.05$ ).

**Conclusion:** Chronic HBV infection can occur in myocardial injury, can be expressed as abnormal manifestation in myocardial enzymes, electrocardiogram, cardiac color Doppler ultrasound, may lead to HBV-related cardiomyopathy. If the chronic HBV infected patients combined of myocardial injury, may be appropriate to relax the anti-viral indications, meanwhile give protect myocardium treatment actively to delay disease progression.

#### **PP-114 Clinicopathologic characteristics of intrahepatic cholangiocarcinoma patients with hepatitis B virus infection**

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**Aim:** To identify the role of HBV in the pathogenesis and prognosis of intrahepatic cholangiocarcinoma (ICC) by a retrospective study.

**Methods:** Ninety-seven ICC patients (59 males and 38 females) were divided into three groups: Group I: HBsAg-positive and anti-HBc-positive ( $n = 26$ ); Group II: HBsAg-negative and anti-HBc-positive ( $n = 50$ ); Group III: HBsAg-negative and anti-HBc-negative ( $n = 21$ ). The clinicopathologic features were compared and analyzed.

**Results:** Compared with Group III, the mean age ( $P = 0.018$ ) and the positive rate of CA19-9 ( $> 37 \text{ U/ml}$ ) ( $P = 0.000$ ) of Group I were significantly lower, while the positive rate of AFP ( $> 25 \text{ ng/ml}$ ) ( $P = 0.012$ ), PT value ( $P = 0.030$ ), hepatic cirrhosis ( $P = 0.001$ ) and the account of poor differentiation ( $P = 0.028$ ) were significantly higher. In addition, patients of Group I had worsen outcome compared to Group II and Group III ( $P = 0.010$ ).

**Conclusion:** ICC patients infected by HBV tend to develop tumor at earlier age, be AFP positive and CA19-9 negative, get hepatic cirrhosis, have higher PT value, poor differentiation and worsen outcome. HBV-associated ICC and HCC may hold common disease process for carcinogenesis.

#### **PP-115 Alteration of Treg/Th17 ratio in patients with HBV infection: serum cytokine profile and peripheral cell population**

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**Background and Aim:** Cellular immune mechanisms involving T cell reaction are considered to be significantly involved in the pathogenesis of hepatitis B virus (HBV) infection. Many studies have independently revealed that Treg cells and Th17 cells played antagonism role in chronic HBV infection, and imbalance between Treg and Th17 exist in chronic HBV infection. These prompted us to investigate whether the Treg/Th17 balance altered during HBV infection and, if it did, what cytokine circumstances could contribute to this change.

**Methods:** The serum concentration of Treg/Th17 differentiation-related cytokines in 18 patients with chronic hepatitis B (CHB), 17 patients with acute-on-chronic hepatitis B liver failure (ACHBLF), 10 patients with acute hepatitis B (AHB), 12 asymptomatic HBV carriers, and 10 normal controls was measured by enzyme-linked immunosorbent assay (ELISA). Peripheral population of Th17 and Treg cells was analyzed by flow cytometric assay.

**Results:** Compared with normal controls, patients with acute liver inflammation had environments prone to Th17 cells differentiation, and accompanied with higher frequency of Th17 cells and higher level of IL-17A. The ratios of Tregs to Th17 cells in CHB and ACHBLF patients were significantly lower than those in normal controls and asymptomatic HBV carriers. The frequency of Th17 cells or the serum IL-17A levels were significantly correlated with liver injury and HBV load in patients with HBV infection. Furthermore, the Treg/Th17 ratio was significantly correlated with liver injury and HBV load in patients with HBV infection, too.